

COMPLETE SUGARCANE PACKAGE FOR FARMERS BY VST SHAKTI POWER TILLER



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INTRODUCTION

VST SHAKTI 130DI POWER TILLER - BEST IN THE FIELD FOR SUGARCANE CROP

VST Shakti gives a guide for complete sugarcane package for farmers. It aims to cover complete process, agricultural implements required, key benefits of using VST tillers for cultivation and economics of sugarcane farming.



KEY FEATURES

- Rotary widths: 600, 540 & 340 mm.
- Turning Radius: with brake 1.0 mt; without brake 1.5 mt
- Best for Inter Cultivation – 1.22 mt & 1.53 mt width.
- Less soil compaction; very good tilling; 25% increase in yield and field coverage.
- Robust transmission assembly design, which is capable of taking extreme loads even on dry soil.

KEY BENEFITS

- First company to introduce Power Tillers as farm machinery replacing manual farming.
- Easy maneuverability & light in weight.
- Unique design; easy availability of spares & service; good resale value.
- Established brand over decades in the farming community.

FIELD PREPARATION

CULTIVATOR

A Cultivator is used to break up the soil prior to sowing. It is drawn by the power tiller.



KEY FEATURES

- Tynes / blades are designed for heavy duty working.
- 5 tynes are provided in rigid type cultivators.
- 0.25 ~ 0.4 acres can be cultivated in 1 hour with average diesel consumption of 1.0 ~ 1.25 lts / hr of operation

KEY BENEFITS

- Rigid cultivator is used for tilling soil.
- Helps in preparing the soil for a new crop.
- Has high strength & rigidity.
- Tough in construction.

INTER CULTIVATION / DE-WEEDING

Inter-cultivation, also known as inter-culturing, is the cultivation of soil between sugarcane crop rows. In other words, the soil between the two row of crops are ploughed using dedicated plough equipment for weeding, improving soil aeration, and loosening the soil compaction.



KEY FEATURES

- Tynes / blades are designed for heavy duty working.
- Strong spikes are provided on the metal wheel for better gripping.
- 0.4 ~ 0.6 acres of land can be cultivated in 1 hr with average diesel consumption of 1.0 ~ 1.25 lts / hr

KEY BENEFITS

- Smaller width rotary (340mm) is specifically designed to remove unwanted weeds, grass etc., in between the rows.
- Helps in retaining the moisture / manure for the main sugarcane crop.
- Unique designed metal wheels with extension are available for inter cultivation between the rows.
- Easy to operate due to less weight.
- Tough in construction.

WATER PUMP



KEY FEATURES

- Pump is driven by a belt connected to engine pulley.
- 7.6 x 5 cms pump is most suitable for general purpose use.
- Suction head (height) – 5 meter
- Delivery head (height) – upto 7.62 meter
- Discharge – 440 lts / min
- Average fuel consumption – 1.25 ~ 1.5 lts / min

KEY BENEFITS

- Useful for pumping water from irrigation canals, lakes and wells, etc..
- This is very essential where there is water scarcity or less rainfall.
- Crops can be safe guarded with timely supply of water.
- A tanker with self priming pump can be easily fitted for cleaning septic tanks, cess pools, clogged drainage, wells etc.

HAULAGE

TRANSPORTATION



KEY FEATURES

- Trailer capacity is maximum 1.5 tons.
- Standard dimensions –
3.85 x 1.10 x 0.40 mts (L x W x H)
- Average consumption of diesel is
1.0 lts ~ 1.25 lts / hr.
- Trailers can be suitably modified for:
 - Garbage collection & transportation
 - A tanker of maximum capacity 1000 lts for carrying water

KEY BENEFITS

- Primarily required for transporting manure, chemicals, implements, produce etc.
- Trailer with a mechanical brake is commonly used.
- Hydraulic tipping type can be made on specific request.
- Spraying pump can be fitted with modification for spraying application.

INDICATIVE COMMERCIAL OFFER – CUSTOM HIRING BY VST SHAKTI

SL. NO.	IMPLEMENT	INDICATIVE PRICE* (Rs.)
1	Cultivator	7,700
2	340 mm Rotavator	26,400
3	Bharni Wheel Set	14,050
4	Water Pump	22,000
5	Trailer	55,000
	Total	1,25,150
6	VST Shakti 130 DI Power Tiller	1,60,000
7	Total Cost With Tiller	2,85,150

Freight & taxes etc as applicable

*As on July 2016

PAY BACK PERIOD

SL. NO	DESCRIPTION	FUEL EXPENSES (Rs/hr)	MAINTENANCE OF TILLER & WEAR/TEAR (Rs/hr)	LABOUR COST (Rs/hr)	TOTAL EXPENSE (Rs/hr)	HIRING COST (Rs/hr)	NET INCOME (Rs/hr)	WORKING FOR 1 SEASON (90 ACRES)	INDICATIVE EARNING
1	Cultivator	60	10	50	120	500	380	240	91,200
2	340 mm Rotary	60	10	50	120	500	380	240	91,200
3	Bharni Sugarcane Wheel	24	20	50	94	250	156	150	23,400
4	Water Pump	24	10	50	84	175	91	200	18,200
5	Trailer	48	15	50	113	175	62	100	6,200
TOTAL INCOME									2,30,200
IF 80% IS ACHIEVED									1,84,160
TOTAL INVESTMENT									2,85,150
DEPRECIATION @ 15%									42,773
NETT INCOME									1,41,388
ROI									50%
PAY BACK PERIOD									~ 2 SEASONS

Assumption - 100% is 1 season

ASSUMPTIONS MADE

OPERATION	ACRES/ DAY (8 HOURS)	ACRES/ HOUR	NO. OF DAYS REQD FOR 90 ACRES	NO. OF HOURS
Cultivator	3	0.38	30	240
Rotavator	3	0.38	30	240
Intercultivation	5	0.625	18	144
Water Pump	5	0.63	18	144
Trailer	4	0.50	23	180

- Cultivator maintenance after every season ~ Rs. 1,500/-
- Diesel cost Rs. 48 / ltr is considered
- Recommend service of power tiller (includes change of oil and filters) at the end of season - Rs. 3,500/-
- Salary towards labour Rs. 7,500 / month for working 8 hours a day for 25 days

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